

REMARKS/ARGUMENTS

Claim Rejections 35 U.S.C. § 103

Claims 1, 3, 26, 28, were rejected under 35 U.S.C. 103(a) as being unpatentable over Wheatley, III, et al. (US PAT: 5,107,225, hereinafter Wheatley) in view of Lane (US PAT: 6,868,128, filed 7-5-2000).

Claims 5-7, 27, 29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wheatley in view of Lane as applied to claims 1 and 26 above, and further in view of Suganuma et al. (US PAT: 5,507,023, hereinafter Suganuma).

Claims 2 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheatley in view of Lane as applied to claim 1 above, and further in view of Spiegel (US 2002101 501 74A1, Provisional application No. 601257,289, filed on Dec 26, 2000).

Applicant respectfully traverses the rejection of Claims 1 and 26. Lane does not have the recited element of Claims 1 and 26 "each having a channel filter with gain adjustable by said hardware". In contrast, Lane's channel filter elements 20 and 22 do not have adjustable gain. Lane adjusts the gain afterwards, in the AGCs 24 and 26, as shown in Fig. 1 and 2 and as stated in Col 5 L 41 – 45, which state "the signal-processing paths, further process the baseband signals by filtering the I and Q signals (via the baseband channel filters 20, 22), linearly amplifying the filtered signals (vias the AGC's 24, 26). Thus Lane does not teach the gain-adjustable filter; the gain adjustment is done later, in the AGC's.

However, this worsens SNR and reduces flexibility in the operation of the system. Being non-adjustable, the filters are not optimal and produces a non-optimal output signal, which then gets operated on. But since the output signal is already non-optimal, the subsequent operations cannot recover from a non-

optimal situation. This causes a signal-to-noise (SNR) issue in the design of communication systems.

Further, since Lane has gone to the trouble of having a separate element following the filter to adjust gain, Lane does not intend to adjust the gain in the filter. Therefore, Lane also teaches away from adjusting the gain in the filter itself. Claims 1 and 26 are thus believed allowable.

Dependent Claims 2, 3, 5 – 7, 27 - 30 should be allowable for the at least foregoing reason. Further arguments will be presented pending the Examiner's decision regarding the all-important independent claims. Applicant believes the Lane reference is not relevant and is very concerned that the main independent claims were rejected and yet would have to pay additional moneys to the USPTO just to gain a hearing on this.

Allowable Subject Matter

Claims 8 – 24 were allowed. Applicant thanks the Examiner.

Respectful request is made for entering the amendments which place this application in condition for allowance, and issuing a Notice of Allowance.

Respectfully submitted,

/Dolly Y. Wu/
Dolly Y. Wu
Reg. No. 59,192
Texas Instruments Incorporated
PO Box 655474, M/S 3999
Dallas, Texas 75265
972.917.4144

